

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-NM-284-AD; Amendment 39-13770; AD 2004-16-14]

RIN 2120-AA64

Airworthiness Directives; Thales Avionics Traffic Advisory/Resolution Advisory (TA/RA) Vertical Speed Indicator–Traffic Alert and Collision Avoidance System (VSI-TCAS) Indicators, Installed on But Not Limited to Certain Transport Category Airplanes Equipped With TCAS II Change 7 Computers (ACAS II)

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Thales Avionics TA/RA VSI-TCAS indicators, installed on but not limited to certain transport category airplanes equipped with TCAS II change 7 computers (ACAS II), that requires a revision to the airplane flight manual (AFM) to advise the flightcrew to follow the audio annunciation when an RA fail message is triggered during a multi-aircraft encounter. This action also requires modification of the software for the TA/RA VSI-TCAS indicator, which would terminate the requirement for the AFM revision. This action is necessary to prevent the TA/RA VSI-TCAS indicator from displaying a conflicting "RA FAIL" message during a multi-aircraft encounter, which could result in the flightcrew ignoring the correct aural command and traffic display information if the flightcrew believes the TCAS II computer has malfunctioned, and consequently lead to a mid-air collision with other aircraft. This action is intended to address the identified unsafe condition.

DATES: Effective September 13, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of September 13, 2004.

ADDRESSES: The service information referenced in this AD may be obtained from Thales Avionics, Air Transport Avionics, 105 avenue du Général Eisenhower, BP 1147, 31036 Toulouse Cedex 1, France; or Thales Avionics, Regional and Business Aircraft Avionics, 105 avenue du Général Eisenhower, BP 1147, 31036 Toulouse Cedex 1, France; or Thales Avionics, Avionics for Military Aircraft, Rue Toussaint Catros, 33187 Le Haillan Cedex, France. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft

Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:
http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

FOR FURTHER INFORMATION CONTACT: Abby Malmir, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5351; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Thales Avionics TA/RA VSI-TCAS indicators, installed on but not limited to certain transport category airplanes equipped with TCAS II change 7 computers (ACAS II) was published in the Federal Register on May 7, 2004 (69 FR 25514). That action proposed to require a revision to the airplane flight manual (AFM) to advise the flightcrew to follow the audio annunciation when an RA fail message is triggered during a multi-aircraft encounter. That action also proposed to require modification of the software for the TA/RA VSI-TCAS indicator, which would terminate the requirement for the AFM revision.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Request To Add New Part Number (P/N)

One commenter states that French airworthiness directive F-2004-042, dated March 31, 2004, which is referenced in the FAA's proposed AD, has been superseded by French airworthiness directive F-2004-053, dated April 14, 2004. The commenter also states that the superseding French airworthiness directive adds missing P/N 457400SB0711. We infer that the commenter requests that we add this missing part number to the final rule.

While we agree with the intent of the inferred request, no change to this final rule is necessary in this regard, since P/N 457400SB0711 is already included in the applicability of this AD. Furthermore, in the preamble of the proposed AD, we explained that affected P/N 457400SB0711, as listed in Thales Avionics Service Bulletin 457400-34-083, Revision 03, dated January 26, 2004, was inadvertently omitted from French airworthiness directive F-2004-042. We had determined that the omitted part number is subject to the same unsafe condition of the proposed AD and, therefore, had included it in Table 1 of the proposed AD. Additionally, we mentioned that the Direction Generale de l'Aviation Civile (DGAC), which is the airworthiness authority for France, had informed us of its plan to revise French airworthiness directive F-2004-042 to include the omitted part number. Therefore, we have revised this final rule to reference the revised French airworthiness directive F-2004-053, dated April 14, 2004.

Request To Revise Service Bulletin References

The same commenter notes that while the proposed AD references the current revision level and date of each vendor service bulletin, the French airworthiness directive does not reference any revision level. The commenter states that the French airworthiness directive specifies instead that the latest revision of the vendor service bulletin is acceptable for compliance. The commenter also notes that if a service bulletin needs to be revised in the future, then a revision to this AD would also be necessary. We infer that the commenter requests we revise the service bulletin references in this AD to specify that use of "later FAA-approved revisions" is acceptable for compliance with this AD.

We do not agree with the inferred request. When referencing a specific service bulletin in an AD, using the phrase, "later FAA-approved revisions," violates Office of the Federal Register regulations for approving materials that are incorporated by reference. However, affected operators may request approval to use a later revision of a referenced service bulletin as an alternative method of compliance (AMOC), in accordance with paragraph (c) of this AD.

Request To Confirm Affected Part Numbers

One commenter requests that we confirm the validity of P/N 457400GA1311 and P/N 457400GB1311. The commenter states that, although these part numbers are listed in Table 1 of the proposed AD, they are not listed in the effectivity of the referenced Thales Avionics Service Bulletin 457400-34-083, Revision 03, dated January 26, 2004. The commenter notes that it has contacted the manufacturer regarding this issue. If the manufacturer agrees that these two part numbers were overlooked and consequently publishes a revised service bulletin, the commenter asks that we consider referencing the latest revision of that service bulletin in this AD. The commenter believes this will ensure synchronization between the service bulletin and the proposed AD, eliminating any confusion in complying with the proposed AD.

We do not agree that any further action is warranted, since the applicability of an AD takes precedence over the effectivity listed in any service bulletin. Although we recognize that P/Ns 457400GA1311 and 457400GB1311 are not listed in the effectivity of Thales Avionics Service Bulletin 457400-34-083, as referenced in this AD, these affected part numbers are included in the applicability of this AD. In developing this AD, we coordinated with the DGAC to identify the applicability as all Thales Avionics TA/RA VSI-TCAS indicators, with P/N 457400-(*), except P/Ns 457400GA1502, 457400GB1502, 457400MA1502, 457400MB1502, 457400ZA1502, and 457400ZB1502, installed on but not limited to certain transport category airplanes equipped with TCAS II change 7 computers (ACAS II). Moreover, paragraph 3.3 of French airworthiness directive F-2004-042, dated March 31, 2004, lists affected P/Ns 457400GA1311 and 457400GB1311 and references Thales Avionics Service Bulletin 457400-34-083 as the appropriate source of service information for accomplishing the software modification for these TA/RA VSI-TCAS indicators. If Thales Avionics Service Bulletin 457400-34-083 is revised, affected operators may request AMOC approval to use the later revision of the Thales Avionics service bulletin, in accordance with paragraph (c) of this AD.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the change described previously. The FAA has determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

We do not know how many aircraft, equipped with Thales Avionics TA/RA VSI-TCAS indicators and TCAS II change 7 computers (ACAS II), of the affected design are in the worldwide fleet or on the U.S. Register. We do, however, know that it will take approximately 2 work hours per airplane to accomplish the required actions, and that the average labor rate is \$65 per work hour. Required parts, for 2 TCAS displays per airplane, will cost approximately between \$1,316 and \$1,826 per airplane. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be between \$1,446 and \$1,956 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD

rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-16-14 Thales Avionics (Formerly Sextant Avionique): Amendment 39-13770. Docket 2002-NM-284-AD.

Applicability: Thales Avionics traffic advisory/resolution advisory (TA/RA) vertical speed indicator-traffic alert and collision avoidance system (VSI-TCAS) indicators, part number (P/N) 457400-(*), except P/Ns 457400GA1502, 457400GB1502, 457400MA1502, 457400MB1502, 457400ZA1502, and 457400ZB1502, installed on but not limited to Airbus Model A300 B2, A300 B4, and A310 series airplanes; Model A300 B4-600, B4-600R, C4-605R Variant F, and F4-600R (collectively called A300-600) series airplanes; and Aerospatiale Model ATR42 and ATR72 series airplanes; certificated in any category; equipped with TCAS II change 7 computers (ACAS II).

Compliance: Required as indicated, unless accomplished previously.

To prevent the TA/RA VSI-TCAS indicator from displaying a conflicting "RA FAIL" message during a multi-aircraft encounter, which could result in the flightcrew ignoring the correct aural command and traffic display information if the flightcrew believes the TCAS II computer has malfunctioned, and consequently led to a mid-air collision with other aircraft; accomplish the following:

Revision of the Airplane Flight Manual (AFM)

(a) Within 15 days after the effective date of this AD, revise the Limitations Section of the AFM to include the following statement (this may be accomplished by inserting a copy of this AD into the AFM):

"Limitation:"

When the TA/RA VSI-TCAS indicates an RA fail message, the flightcrew must follow the audio annunciation "Maintain Vertical Speed, Maintain" until "clear of the conflict" audio annunciation has occurred.

Note: When a preventive Don't Climb/Don't Descend resolution advisory (RA) is triggered by simultaneous, multi-aircraft encounter configuration, the TA/RA VSI-TCAS may indicate an RA fail message. The audio annunciation "Maintain Vertical Speed, Maintain" and traffic display information are correct. In this specific case, the flightcrew must follow the audio annunciation and, therefore, maintain the vertical speed until clearance of the conflict condition has occurred."

Note 1: When a statement identical to that in paragraph (a) of this AD has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM.

Software Modification

(b) Within 48 months after the effective date of this AD, modify the software for the TA/RA VSI-TCAS indicator by accomplishing all the actions specified in the Accomplishment Instructions of the applicable service bulletin listed in Table 1 of this AD. Doing this modification terminates the requirements of paragraph (a) of this AD. After accomplishing the modification, the AFM limitation required by paragraph (a) of this AD may be removed from the AFM.

TABLE 1.—APPLICABLE SERVICE BULLETIN

P/N	Thales Avionics service bulletin	Revision level	Date
457400EA0311, 457400EB0311, 457400FA0311, 457400FB0311	457400-34-083	03	January 26, 2004.
457400GA0011	457400-34-085	00	February 5, 2004.
457400GA0311, 457400GA0602, 457400GA0911, 457400GA1100, 457400GA1311, 457400GA1312.	457400-34-083	03	January 26, 2004.
457400GA1900	457400-34-082	Original	November 28, 2002.
457400GB0011	457400-34-085	00	February 5, 2004.
457400GB0911, 457400GB1100, 457400GB1311, 457400GB1312	457400-34-083	03	January 26, 2004.
457400GB1900	457400-34-082	Original	November 28, 2002.
457400GB2000	457400-34-084	02	December 19, 2003.
457400GB2100, 457400HA1900, 457400JA1900, 457400KA0602, 457400KA1311, 457400KA1900, 457400KB1311, 457400KB1900.	457400-34-083	03	January 26, 2004.
457400LA2000	457400-34-084	02	December 19, 2003.
457400MA0602, 457400MA1311, 457400MB1311, 457400PA1900, 457400PB1900, 457400RA0711, 457400RB0711, 457400SA0711, 457400SB0711, 457400TB0811, 457400TC0811, 457400UA1311, 457400UA1900, 457400UB1900, 457400UB1311, 457400WA0811, 457400WB0811, 457400ZA1900.	457400-34-083	03	January 26, 2004.

Alternative Methods of Compliance

(c) In accordance with 14 CFR 39.19, the Manager, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, is authorized to approve alternative methods of compliance for this AD.

Incorporation by Reference

(d) Unless otherwise specified in this AD, the actions shall be done in accordance with the applicable service bulletin listed in the following table:

TABLE 2.—MATERIAL INCORPORATED BY R E FERENCE

Service bulletin	Revision level	Date
Thales Avionics Service Bulletin 457400–34–082	Original	November 28, 2002.
Thales Avionics Service Bulletin 457400–34–083	03	January 26, 2004.
Thales Avionics Service Bulletin 457400–34–084	02	December 19, 2003.
Thales Avionics Service Bulletin 457400–34–085	00	February 5, 2004.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Thales Avionics, Air Transport Avionics, 105 avenue du Général Eisenhower, BP 1147, 31036 Toulouse Cedex 1, France; or Thales Avionics, Regional and Business Aircraft Avionics, 105 avenue du Général Eisenhower, BP 1147, 31036 Toulouse Cedex 1, France; or Thales Avionics, Avionics for Military Aircraft, Rue Toussaint Catros, 33187 Le Haillan Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Note 2: The subject of this AD is addressed in French airworthiness directive F-2004-053, dated April 14, 2004.

Effective Date

(e) This amendment becomes effective on September 13, 2004.

Issued in Renton, Washington, on July 30, 2004.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-17981 Filed 8-6-04; 8:45 am]

BILLING CODE 4910-13-P